

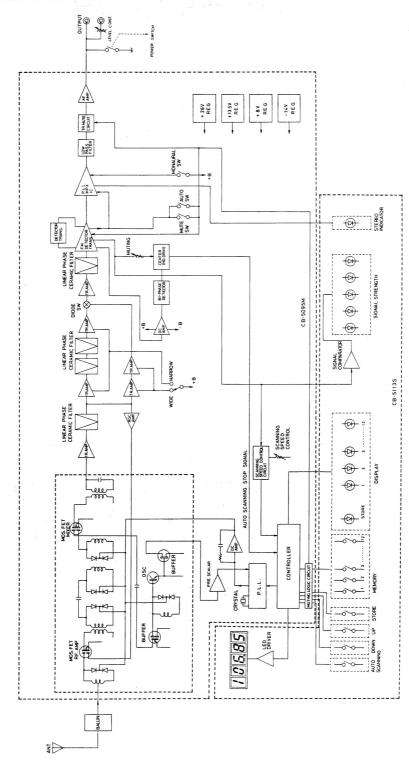
DIGITAL FREQUENCY SYNTHESIZED FM STEREO TUNER



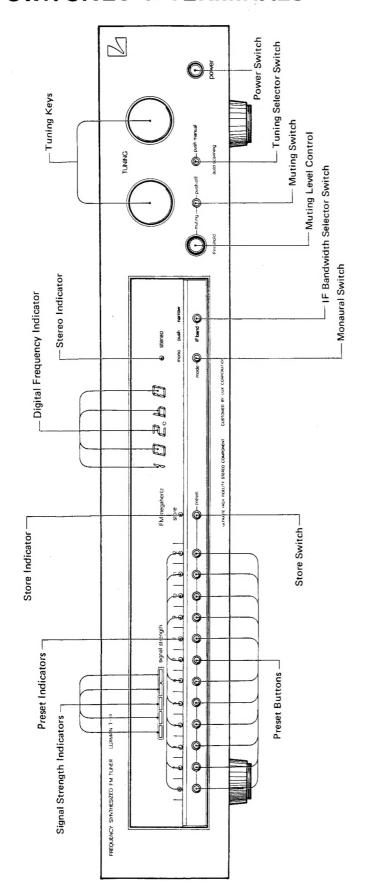
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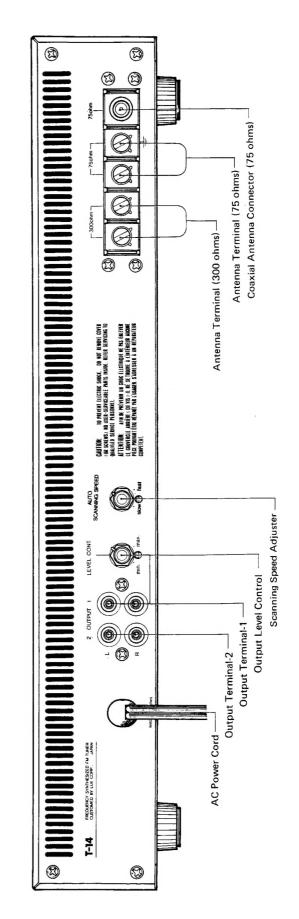
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14 SCHEMATIC DIAGRAM
ANDARD CURVES
ECIFICATIONS

BLOCK DIAGRAM



SWITCHES & TERMINALS





1

ALIGNMENT PROCEDURE

Adjustment Point on CB-5095M

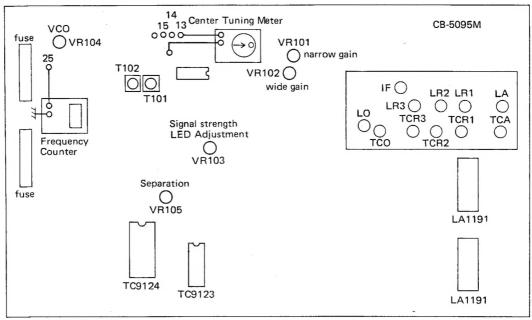
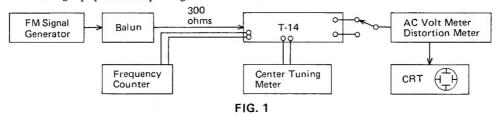


Fig. 2

T-14 SYNTHESIZED FM TUNER ALIGNMENT PROCEDURES

[1] Testing Equipments

Connect all the testing equipments as per Fig. 1.



[2] Pre-Setting of Volumes.

VR101: Turn clockwise to the maximum for IF narrow gain adjustment

VR102: Turn counter-clockwise to the maximam for IF wide gain adjustment.

VR103: Turn to the center position for signal strength level.

VR104: Turn to the center position for MPX VCO adjustment.

VR105: Turn to the center position for MPX separation adjustment.

[3] Setting of Front Panel Functions.

Muting Threshold VR: Turn counter-clockwise to the maximam.

Power Switch :: Off
IF Band Switch : Off (wide)
Auto Scanning Switch: Off (manual)
Mode Switch : Off (stereo)

Connect Center Tuning Meter and Frequency Counter as per Fig. 2.

Connect Distortion Meter, AC Volt Meter and Oscilloscope to the output terminal of the T-14 as per Fig. 1. Set Power Switch "ON".

[4] IF Adjustment

- (1) Set Signal Generator at 98MHz with output, 1mV 100% modulation.
- (2) Tune the T-14 at 98MHz.
- (3) Confirm the 1KHz signal coming at the output terminal of the T-14.
- (4) Adjust T101, FM Transformer to null point of Center Tuning Meter
- (5) Adjust T102, FM Transformer to make distortion minimum.
- (6) Repeat the above procedures 4 and 5 three or four times to obtain the "null" point of Center Tuning Meter and minimam distortion at the same time.

[5] Tracking Adjustment

- (1) Set output of signal Generator at $2\mu V$ and adjust IF coil of the front-end to make the tuner's output and sensitivity maximum.
- (2) Set signal Generator at 106MHz, output 2μV, 1KHz 100% modulation and tune T-14 at 106MHz.
- (3) Turn TCA, TCR1 ~ 3, the trimmers of the front-end to obtain maximum output level and sensitivity.
- (4) Also set Signal Generator at 90MHz, output 2µV, 1KHz 100% modulation and turn the T-14 at 90MHz.
- (5) Adjust LA, LR1 ~ 3, the coil of the front-end to obtain maximam output level and sensitivity.
- (6) Repeat step 2 through 5 as necessary to obtain maximam sensitivity on station.

[6] Muting and Signal Strength Adjustment

- (1) Set signal Generator at 98MHz, 1KHz 100% modulation.
- (2) Push muting SW. at "ON" and set output of signal Generator to $2\mu V$ and adjust VR102 to appear the signal of 1KHz.
- (3) Set IF band SW. at "narrow" and adjust VR101 to same as step (2).
- (4) Adjust VR103 to make 5th L.E.D. of signal strength indicator light at $50\mu V$.
- (5) Make output Signal Generator null and confirm L.E.D. unlit.

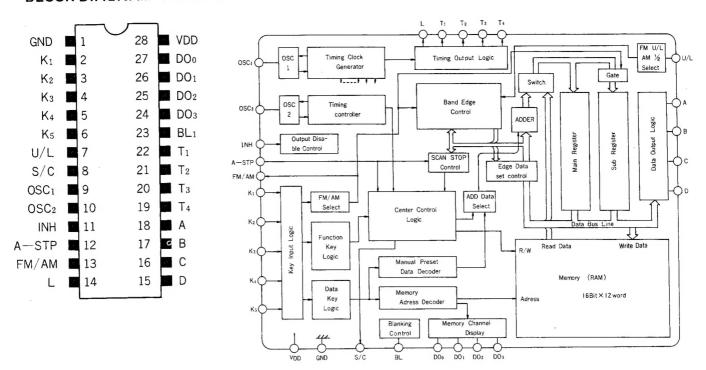
[7] MPX Adjustment

- (1) Set Signal Generator at 98MHz non-modulation, output 1mV and adjust VR104 to get VCO frequency 76KHz₋₅₀ Hz frequency counter reading.
- (2) Make left or right stereo modulation at 1KHz 90%, pilot signal 10%, with Signal Generator and adjust VR105 to make separation maximam and balanced on left and right channels.

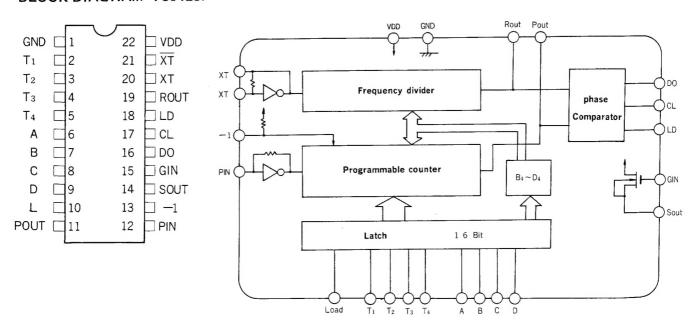
[8] Confirmation

- a) S/N and other specifications to meet rated specifications.
- b) L.E.D.'s of Signal Strength Indicator not to light at no signal input and to light in order from 1st to 5th according to inputsignal of T-14.
- c) Muting level to Vary from 10 to 100 µV with muting threshold VR.
- d) Stereo indication L.E.D. to light within 1 second upon stereo reception.
- e) Pre-set tuning on right function and memory store as well.
- f) Memory frequency not to change or store, by ON-OFF operation of power SW.
- g) To scan between 87.55MHz and 108,00MHz under auto-tuning at no signal input.
- h) To automatically stop under auto-tuning when the signal in the procedure [7] (2) is given.
- i) To start scanning when tuning button is continuously pressed for a few seconds and to stop when tuning button is released under manual-tuning.
- j) Tuning frequency to increase or decrease by every 50kHz on one push of UP-DOWN key manual tuning.
- k) Reciving frequency not to be less than 87.55MHz and more than 108.00MHz.
- 1) Scanning speed to be slow or fast by turning of scanning VR. on the rear panel.

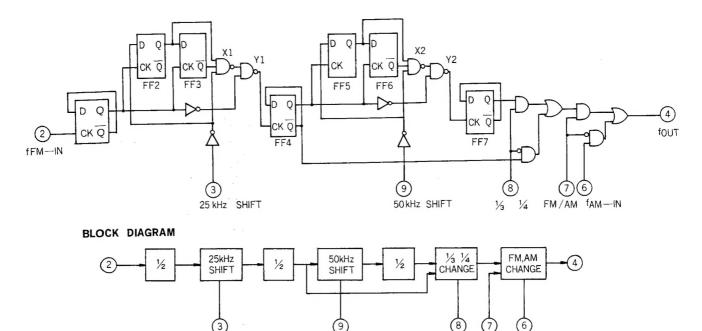
BLOCK DIAGRAM TC9124AP



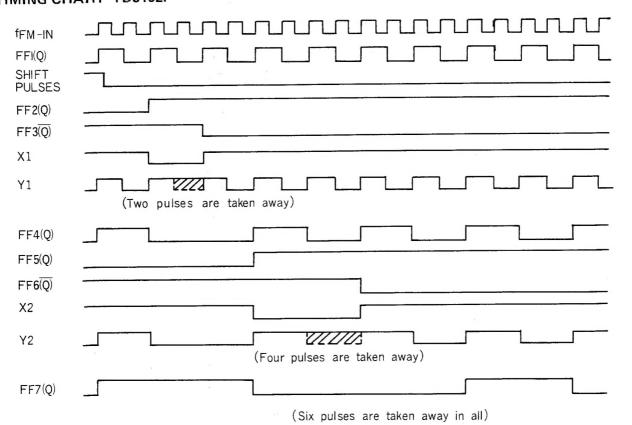
BLOCK DIAGRAM TC9123P



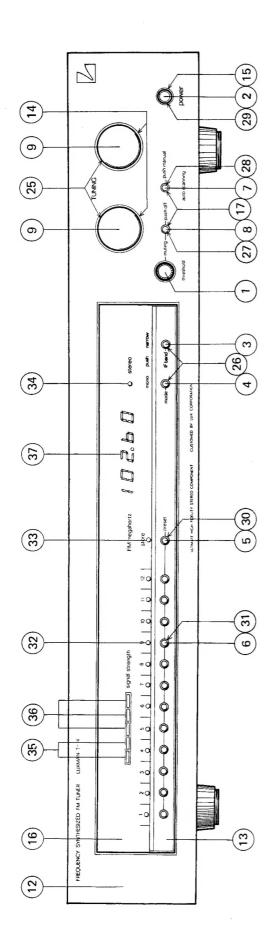
LOGIC DIAGRAM TD6102P

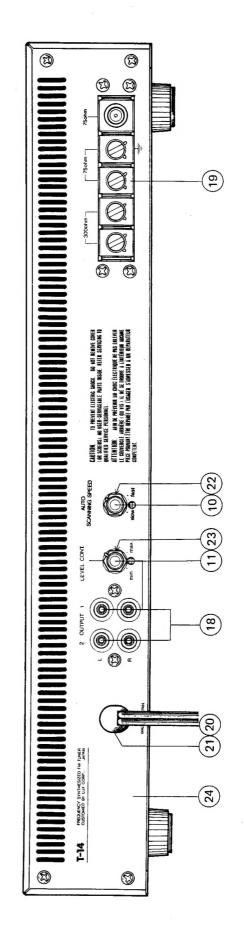


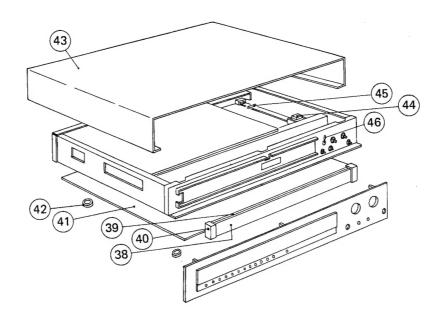
TIMING CHART TD6102P



EXPLODED VIEW







EXPLODED VIEW. Parts List.

REF. NO.	STOCK NO.	DESCRIPTION
[Knob]		
1	WH1083	Threshold
2	WJ 1089	Power
3	WJ1120	IF Band
4	WJ1120	Mode
5	WJ1128	Store
6	WJ1128	Preset
7	WK1097	Auto Scanning
8	WK1097	Muting (Push Off)
9	WK1123	Tuning
10	WJ0001	Auto Scanning Speed
11	WJ0001	Level Control
[Front Pa	nel Ass'y]	
12	WA1176	Front Panel
13	WD1117	Escutcheon
14	WE1056	Protector (Tuning)
15	WE1066	Protector (Power)
16	WE1084	Protector
17	WE1086	Protector (Tuning, Muting)
[Rear Par	nel Ass'y]	
18	AT0012	Terminal (Out Put)
19	AT0121	Terminal (Antenna)
20	BK0023	Power Cord (SG)
	BK0022	Power Cord (SK, EK)
	BK0018	Power Cord (EZ)
21	BU0033	Cord Stopper (SK, EK, EZ)
	BU0039	Cord Stopper (SG)
22	RV0208	VR. 50K-B (Auto Scanning
]		Speed)
23	RV5060	VR. 50KBx2 (Level Control)
24	UC1149	Rear Panel
[Switch]		
25	SP5029	Tuning
26	SP5036	IF Band, Mode

REF. NO.	STOCK NO.	DESCRIPTION
27	SP5037	Muting (Push Off)
28	SP5038	Auto Scanning
29	SP0114	Power
30	SP5034	Store
31	SP5034	Preset
[L.E.D.]		
32	TD0096	Preset
33	TD0096	Store
34	TD0096	Stereo
35	TD0149-B	Signal Strength
36	TD0150-B	Signal Strength
37	TD5024	Digital Frequency Indication
[Cosmetic	c]	
38	WM1055	Dial Scale
39	WU1024	Filter
40	UN1022	Rubber
41	UE5002	Bottom Plate
42	WN0007	Foot
43	UG1023	Bonnet
	WB1086	Wooden Case
[Mechani	sm]	
44	PT5076	Power Trans (SK, SG)
	PT5077	Power Trans (EK, EZ)
45	BF0201	Fuse 0.1AT (SK, SG)
	BF0071	Fuse 0.2A (EK)
	BF0073	Fuse 0.4A (EZ)
46	AL5005	Lamp 30V 40mA
[Packing]	Material]	
	XA1241	Carton
	XE5009	Pad
	ME5012	Owner's Manual

REPLACEMENT PARTS

PARTS LIST . . . (P.C.B.)

REMARKS

Capacitor: El... Electrolitic,

St...Styrol, Ce...Ceramic Ta...Tantalum,

	1a Idirearen	,
SYMBOL NO.	PART NO.	DESCRIPTION
[Semi-Fixed	Resistor]	
VR101 VR102	RT0050 RT0055	500 ohm 1K ohm
VR103	RT0052	20K ohm
VR104	RT0025	4.7K ohm
VR105	RT0085	100K ohm
[Coil]		
L101	LA1143	S-470K
L102	LA1149	S-180J
L103	LA1149	S-180J
L104	LA1143	S-470K
[Filter]		
F101	LA5016	Ceramic KMFC89-A-11
F102	LA5016	Ceramic KMFC89-A-11
F103	LA5016	Ceramic KMFC89-A-11
F104	LA5016	Ceramic KMFC89-A-11
F105	LA1191	Low Pass LUX-1191
F106	LA1191	Low Pass LUX-1191
[FM Trans]		
T101	LA5021	LUX-5021
T102	LA5021	LUX-5021
[Transistor	& IC]	
Q101	TR0198	2SC1815
Q102	TR0233	2SC535
Q103	TR0019	2SC1923
Q104	TR0019	2SC1923
Q105	TR0019	2SC1923
Q106	TR0019	2SC1923
Q107	TR0019	2SC1923
Q109	TR0019	2SC1923
Q110	TC0099	FM IC LA1231NS 2SC1345
Q111	TR0174 TC0100	MPX IC MPC1173C
Q112 Q113	TR0198	2SC1815
Q113	TR0198	2SC1815
Q115	TR0198	2SC1815
Q116	TC5002	IC NJM4558D
Q117	TR0198	2SC1815
Q118	TC5002	IC NJM4558D
Q119	TR0198	2SC1815
Q120	TR0198	2SC1815
Q121	TR0198	2SC1815
Q122	TR0198	2SC1815

SYMBOL NO.	PART NO.	DESCRIPTION
Q123	TC5023	IC TC4081BP
Q124	TR0198	2SC1815
Q125	TR0198	2SC1815
Q126	TC5015	IC TD6102P
Q127	TR0198	2SC1815
Q127 Q128	TC5016	IC TC9123P-GR
-	TC5017	IC TC9124P
Q129		
Q130	TR0118	2SD234
Q131	TR0118	2SD234 2SC1626
Q132	TR0121	
Q501	TC0085	IC BA656
Q502	TC5018	TC5022BP
Q503	TR0259	2SC2120
Q504	TR0259	2SC2120
Q505	TR0259	2SC2120
Q506	TR0259	2SC2120
Q507	TR0198	2SC1815
Q508	TR0087	2SA1015
Qaa	TR0198	2SC1815
Qab	TR0198	2SC1815
Qac	TR0198	2SC1815
[Diode]		
D101	TD0018	1K 188FM-1
D101	TD0018	1K 188FM-1
D102	TD0116	1S2075
D103	TD0116	1S2075
D104 D105	TV0030	KB-265C4
D105	TD0116	1S2075
	TD0116	
D108		1S2075
D109	TD0116	1S2075
D110	TD0116	1S2075
D111	TD0116	1S2075
D112	TD0116	1S2075
D113	TD0116	1S2075
D114	TD0116	1S2075
D115	TD0116	1S2075
D116	TD0116	1S2075
D117	TD0116	1S2075
D118	TD0116	1S2075
D120	TD0116	1S2075
D122	TD0116	1S2075
D123	TD0116	1S2075
D124	TD0116	1S2075
D125	TD0116	1S2075
D126	TD0116	1S2075
D127	TD0116	1S2075
D128	TD0116	1S2075
D129	TD0116	1S2075
D131	TD5023	WZ040
D132	TD5023	WZ040

SYMBOL NO.	PART NO.	DESCRIPTION
D133	TD0079	WZ140
D134	TD0079	WZ140
D135	TD0025	WZ090
D136	TD0036	WZ260
D137	TD0002	1N4002
	TD0002	1N4002 1N4002
D138	TD0138	1B4B41
D139		1S2075
D501	TD0116	
D502	TD0116	1S2075
D503	TD0116	1S2075
D504	TD0116	1S2075
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D514 D515	TD0116	1S2075
	TD0116	1S2075
D516	TD0116	1S2075
D517		1S2075
D518	TD0116	
D519	TD0116	1S2075
D520	TD0116	182075
		1520/3
[Capacitor]		
[Capacitor]		25WV 47000pF (Ce
[Capacitor]		
[Capacitor] C101 C102	CK0158 CE0077	25WV 47000pF (Ce 16WV 47μF El
[Capacitor] C101 C102 C103	CK0158 CE0077 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104	CK0158 CE0077 CK0158 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105	CK0158 CE0077 CK0158 CK0158 CK0155	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106	CK0158 CE0077 CK0158 CK0158 CK0155 CK0155	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107	CK0158 CE0077 CK0158 CK0158 CK0155 CK0155	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109	CK0158 CE0077 CK0158 CK0158 CK0155 CK0155 CK0158 CS0455 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce 25WV 10000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110	CK0158 CE0077 CK0158 CK0158 CK0155 CK0155 CK0158 CS0455 CK0158 CK0155	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111	CK0158 CE0077 CK0158 CK0158 CK0155 CK0155 CK0158 CK0155 CK0158 CK0155	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112	CK0158 CE0077 CK0158 CK0158 CK0155 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0155 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0155	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0155 CK0158	25WV 47000pF (Ce 16WV 47µF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 0.33µF Ta 25WV 47000pF Ce 25WV 47000pF Ce
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[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0155 CK0158	25WV 47000pF (Ce 16WV 47µF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158	25WV 47000pF (Ce 16WV 47µF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 35WV 0.33µF Ta 25WV 47000pF Ce 25WV 10000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158	25WV 47000pF (Ce 16WV 47µF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155	25WV 47000pF (Ce 16WV 47µF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 35WV 0.33µF Ta 25WV 47000pF Ce 25WV 10000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0158 CK0158 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 10000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123 C124	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 25WV 47000pF Ce 35WV 0.33μF Ta 25WV 47000pF Ce 25WV 47000pF Ce
[Capacitor] C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123	CK0158 CE0077 CK0158 CK0158 CK0155 CK0158 CS0455 CK0158 CK0155 CK0158 CK0155 CK0158 CK0155 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158 CK0158	25WV 47000pF (Ce 16WV 47μF El 25WV 47000pF Ce 25WV 47000pF Ce

SYMBOL NO. PART NO. DESCRIPTION C129 CE0098 50WV 1μF El C131 CK0158 25WV 47000pF Ce C132 CK0158 25WV 47000pF Ce C133 CK0158 25WV 47000pF Ce C134 CK0158 25WV 47000pF Ce C135 CC0007 50WV 100pF Ce C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El	1
C131 CK0158 25WV 47000pF Ce C132 CK0158 25WV 47000pF Ce C133 CK0158 25WV 47000pF Ce C134 CK0158 25WV 47000pF Ce C135 CC0007 50WV 100pF Ce C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C149 CE0099 50WV 2.2μF El </td <td></td>	
C131 CK0158 25WV 47000pF Ce C132 CK0158 25WV 47000pF Ce C133 CK0158 25WV 47000pF Ce C134 CK0158 25WV 47000pF Ce C135 CC0007 50WV 100pF Ce C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 50WV 2.2μF El </td <td></td>	
C132 CK0158 25WV 47000pF Ce C133 CK0158 25WV 47000pF Ce C134 CK0158 25WV 47000pF Ce C135 CC0007 50WV 100pF Ce C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 50WV 2.2μF El C150 CE0099 50WV 2.2μF El <td></td>	
C133 CK0158 25WV 47000pF Ce C134 CK0158 25WV 47000pF Ce C135 CC0007 50WV 100pF Ce C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 50WV 2.2μF El C150 CE0099 50WV 2.2μF El <td></td>	
C134 CK0158 25WV 47000pF Ce C135 CC0007 50WV 100pF Ce C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 22μF El C149 CE0099 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce	
C135 CC0007 50WV 100pF Ce C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El	
C136 CE0099 50WV 2.2μF El C137 CE0074 16WV 10μF El C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 22μF El C148 CQ5078 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El	
C137 CE0074 $16WV 10\mu F$ El C138 CK0158 $25WV 47000pF$ Ce C139 CK0158 $25WV 47000pF$ Ce C140 CE0213 $50WV 0.47\mu F$ El C141 CK0158 $25WV 47000pF$ Ce C142 CK0158 $25WV 47000pF$ Ce C143 CK0158 $25WV 47000pF$ Ce C144 CK0158 $25WV 47000pF$ Ce C145 CK0158 $25WV 47000pF$ Ce C146 CE0075 $16WV 22\mu F$ El C147 CE0079 $16WV 220\mu F$ St C148 CQ5078 $50WV 2.2\mu F$ El C150 CE0099 $50WV 2.2\mu F$ El C151 CK0155 $25WV 10000pF$ Ce C152 CE0098	
C138 CK0158 25WV 47000pF Ce C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 220μF El C148 CQ5078 50WV 470pF St C149 CE0099 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta	
C139 CK0158 25WV 47000pF Ce C140 CE0213 50WV 0.47μF El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 220μF El C148 CQ5078 50WV 470pF St C149 CE0099 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce	
C140 CE0213 50WV $0.47μF$ El C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 220μF El C148 CQ5078 50WV 470pF St C149 CE0099 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
C141 CK0158 25WV 47000pF Ce C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 220μF El C148 CQ5078 50WV 470pF St C149 CE0099 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
C142 CK0158 25WV 47000pF Ce C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 220μF El C148 CQ5078 50WV 470pF St C149 CE0099 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
C143 CK0158 25WV 47000pF Ce C144 CK0158 25WV 47000pF Ce C145 CK0158 25WV 47000pF Ce C146 CE0075 16WV 22μF El C147 CE0079 16WV 22μF El C148 CQ5078 50WV 470pF St C149 CE0099 50WV 2.2μF El C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
C146 CE0075 $16WV 22\mu F$ El C147 CE0079 $16WV 220\mu F$ El C148 CQ5078 $50WV 470pF$ St C149 CE0099 $50WV 2.2\mu F$ El C150 CE0099 $50WV 2.2\mu F$ El C151 CK0155 $25WV 10000pF$ Ce C152 CE0098 $50WV 1\mu F$ El C153 CE0168 $50WV 3.3\mu F$ El C154 CS0445 $35WV 0.22\mu F$ Ta C155 CK0158 $25WV 47000pF$ Ce C156 CQ5078 $50WV 470pF$ St	
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C150 CE0099 50WV 2.2μF El C151 CK0155 25WV 10000pF Ce C152 CE0098 50WV 1μF El C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
C153 CE0168 50WV 3.3μF El C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
C154 CS0445 35WV 0.22μF Ta C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
C155 CK0158 25WV 47000pF Ce C156 CQ5078 50WV 470pF St	
C156 CQ5078 50WV 470pF St	
C157 CE0098 50WV 1μ F El	
C158 CE0098 50WV 1µF El	
C159 CS0445 35WV 0.22µF Ta	
C160 CS0445 35WV 0.22µF Ta	
C161 CE0075 16WV 22µF El	
C162 CE0075 $16WV 22\mu F$ El	
C163	
C164 CQ5080 50WV 1500pF St	
C165 CE0077 $16WV 47\mu F$ El	
C166 CE0084 25WV 4.7μF El	
C167 CE0084 25WV 4.7μF El	
C168 CK0126 50WV 1000pF Ce	
C169 CK0126 50WV 1000pF Ce	
C170 CK0155 25WV 10000pF Ce	
C171 CE0098 50WV 1µF El	
C172 CE0084 25WV 4.7μF El	
C173 CE0084 25WV 4.7µF El	
C174 CK0155 25WV 10000pF Ce	
C175 CK0155 25WV 1000pF Ce	
C176 CK0155 25WV 10000pF Ce	
C177 CE0068 10WV 47μ F El	
C178 CK0126 50WV 1000pF Ce	
C179 CC0005 50WV 33pF Ce	
C180 CC0005 50WV 33pF Ce	
C181 CK0155 25WV 1000pF Ce	
C183 CE0070 10WV 220µF El	
C184 CE0099 50WV 2.2µF El	
C185	
C186 CE0070 10WV 220µF El	
C187 CE0090 25WV 1000µF El	
C188 CE0088 25WV 330µF El	
C189 CE0079 16WV 220µF El	
C190 CE0079 $16WV 220\mu F$ El	

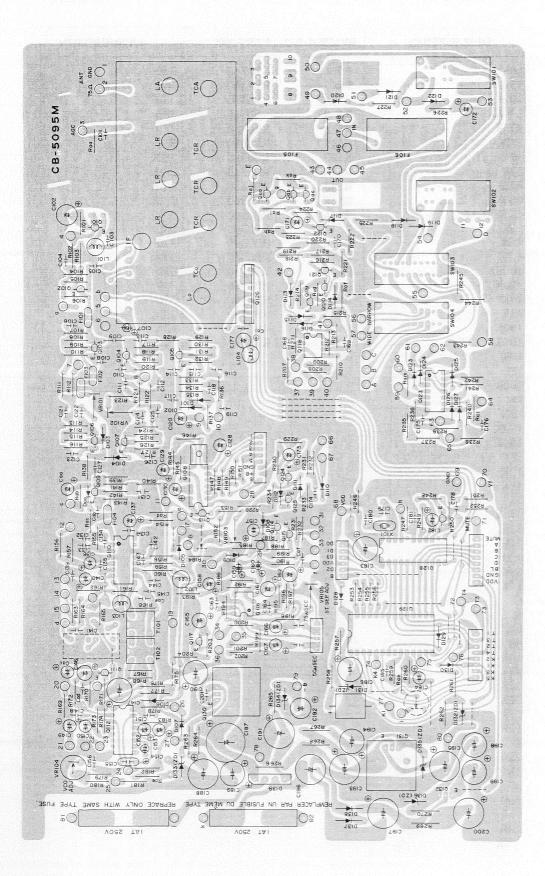
SYMBOL NO.	PART NO.	DESCRIPTION
STMBOL NO.		
C191	CE0087	25WV 220μF El
C192	CE0077	$16WV 47\mu F$ El
C193	CE0087	$25WV 220\mu F$ El
C194	CE0079	16WV 220μF El
C195	CE0080	16WV 470μF El
C196	CE0096	35WV 220μF El
C197	CE0103	50WV 100μF El
C197	CE0094	35WV 47μF El
C198	CE0094	$35WV 47\mu F$ El
	CE0094	$50WV 100\mu F$ El
C200	CE0103	
Cac	CE00/3	16WV 22μF El
[Resistor U	nit: ohm]	1
R101	RB0372	1K
R102	RB0348	100
R103	RB0344	68
R104	RB0364	470
R105	RB0390	5.6K
R106	RB0360	330
R107	RB0376	1.5K
R107	RB0400	1.5K
	RB0360	330
R109		470
R110	RB0364	
R111	RB0348	100
R112	RB0348	100
R113	RB0388	4.7K
R114	RB0412	47K
R115	RB0380	2.2K
R116	RB0356	220
R117	RB0376	1.5K
R118	RB0400	15K
R119	RB0360	330
R120	RB0364	470
R121	RB0348	100
R122	RB0348	100
R123	RB0388	4.7K
R124	RB0338	4.7K
R125	RB0380	2.2K
R126	RB0380	2.2K
R127	RB0356	220
R128	RB0372	1K
R129	RB0400	15K
R130	RB0420	100K
R131	RB0380	2.2K
R131	RB0360	330
R133	RB0406	27K
	RB0400	15K
R134		1
R135	RB0420	100K
R136	RB0348	100
R137	RB0412	47K
R138	RB0388	4.7K
R139	RB0372	1K
R140	RB0348	100
R141	RB0396	10K
R142	RB0360	330
R152	RB0404	22K
R153	RB0404	22K.
R154	RB0396	10K
R155	RB0364	470

SYMBOL NO.	PART NO.	DESCRIPTION	
R156	RB0404	22K	
R157	RB0414	56K	
R158	RB0348	100	
R159	RB0348	100	
R160	RD2566	22 1/2W	
R161	RB0356	220	
R162	RB0404	22K	
R163	RB0412	47K	
R164	RB0412	47K	
R165	RB0396	10K	
R166	RB0394	8.2K	
R167	RB0378	1.8K	
R168	RB0404	22K	
R169	RB0408	33K	
R170	RB0340	47	
R171 R172	RB0388 RB0400	4.7K	
R172 R173	RB0384	15K 3.3K	
R174	RB0384	3.3K	
R175	RB0412	47K	
R176	RB0364	470	
R177	RD2550	47 1/2W	
R178	RB0396	10K	
R179	RB0400	15K	
R180	RB0420	100K	ĺ
R181	RB0396	10K	
R182	RB0396	10K	
R183	RB0372	1K	
R184	RB0412	47K	
R185	RB0412	47K	
R186 R187	RB0412 RB0396	47K	
R188	RB0396	10K 10K	
R189	RB0390	3.3K	
R190	RB0384	3.3K	
R191	RB0420	100K	
R192	RB0420	100K	
R193	RB0412	47K	
R194	RB0408	33K	
R195	RB0380	2.2K	
R196	RB0408	33K	
R197	RB0380	2.2K	1
R198	RB0388	4.7K	
R199	RB0396	10K	
R200	RB0332	22	
R201 R202	RB0332 RB0396	22 10V	
R202 R203	RB0412	10K 47K	
R204	RB0324	10	
R205	RB0384	3.3K	
R206	RB0384	3.3K	
R207	RB0414	56K	
R208	RB0414	56K	
R209	RB0440	680K	
R210	RB0422	120K	
R211	RB0440	680K	
R212	RB0414	56K	
R213	RB0422	120K	
R214	RB0396	10K	
R215	RB0414	56K	

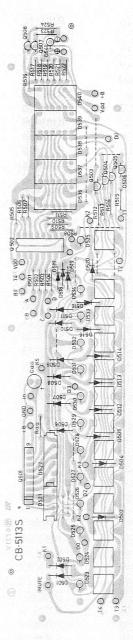
SYMBOI NO.	PART NO.	DESCRIPTION
R216	RB0416	68K
R217	RB0408	33K
R218	RB0420	100K
R219	RB0432	330K
R220	RB0436	470K
R221	RB0374	1.2K
R222	RB0396	10K
R223	RB0404	22K
R224	RB0436	470K
R225	RB0420	100K
R226	RB0388	4.7K
R227	RB0400	15K
R228	RB0388	4.7K
R229	RB0388	4.7K
R230	RB0420	100K
R231	RB0420	100K
R232	RB0396	10K
R233	RB0408	33K
R234	RB0420	100K
R235	RB0420	100K
R236	RB0396	10K
R237	RB0444	1M
R238	RB0420	100K
R239	RB0444	1M
R240	RB0396	10K
R241	RB0420	100K
R242	RB0420	100K
R243	RB0372	1K
R244	RB0398	12K
R245	RB0402	18K
R246	RB0336	33
R247	RB0436	470K
R248	RB0390	5.6K
R249	RB0398	12K
R250	RB0374	1.2K
R251	RB0392	6.8K
R252	RB0396	10K 68
R253	RB0344	68
R254	RB0344 RB0344	68
R255	RB0344	68
R256	RB0396	10K
R257 R258	RB0330	47K
R259	RB0400	15K
R259 R260	RB0404	22K
R261	RB0404	22K
R262	RB0396	10K
R263	RD2542	220 1/2W
R264	RD2542	220 1/2W
R265	RD2582	1K 1/2W
R266	RS2949	33 2W
R267	RD2576	560 1/2W
R268	RD2576	560 1/2W
R269	RD2588	1.8K 1/2W
R270	RD2588	1.8K 1/2W
R501	RB0400	15 K
R502	RB0400	15K
R503	RB0400	15K
R504	RB0400	15K
R505	RB0360	330
	1	

SYMBOL NO.	PART NO.	DESCRIPTION
R506	RB0360	330
R507	RB0360	330
R508	RB0360	330
R509	RB0360	330
R510	RB0360	330
R511	RB0360	330
R512	RB0380	2.2K
R513	RB0380	2.2K
R514	RB0380	2.2K
R515	RB0380	2.2K
R516	RB0360	330
R517	RB0360	330
R518	RB0360	330
R519	RB0360	330
R520	RB0360	330
R521	RB0360	330
R522	RB0360	330
R523	RB0380	2.2K
R524	RB0418	82K
Rah	RB0396	10K
Raj		
Rak		

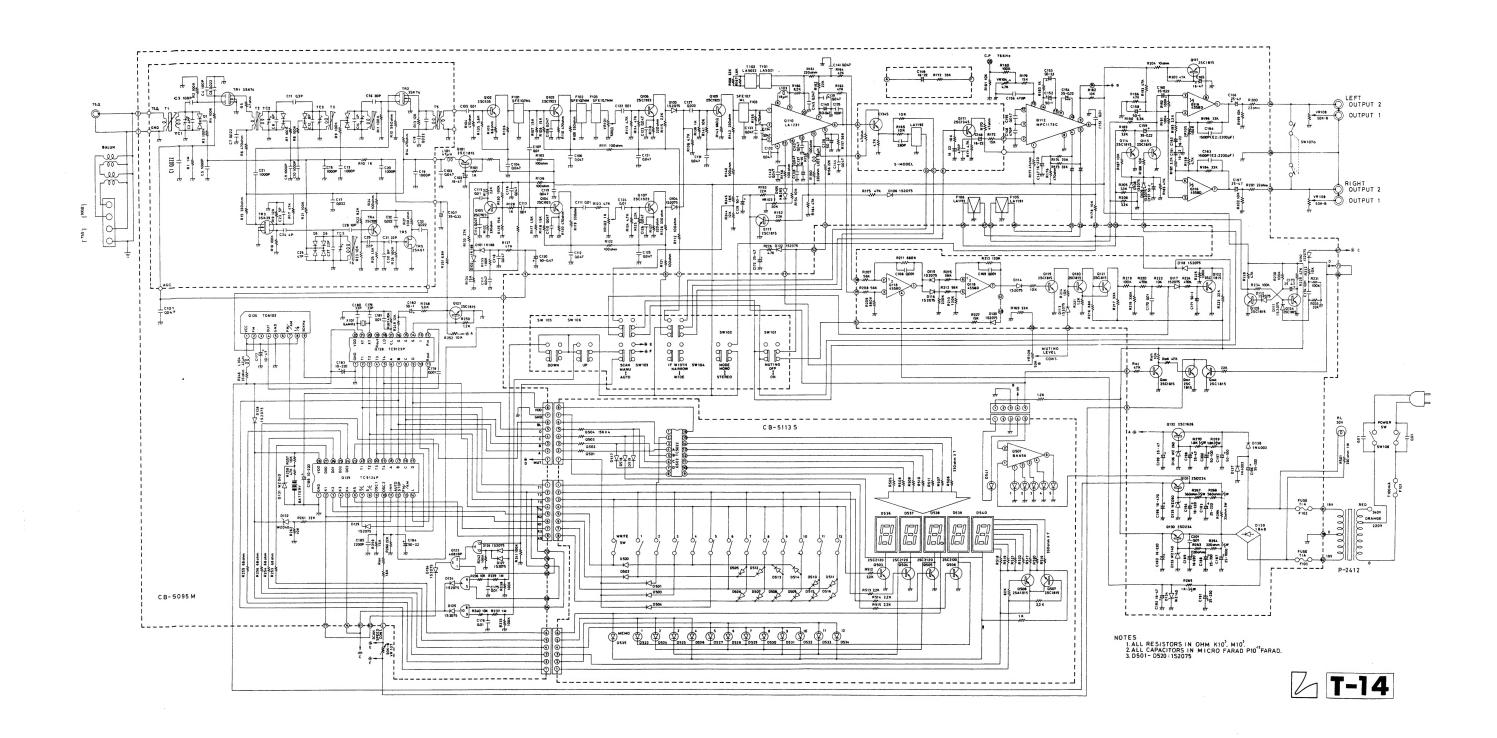
CB-5095M



CB-5113S

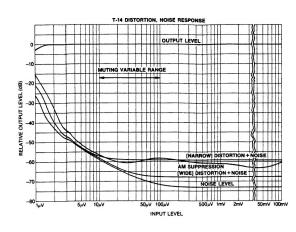


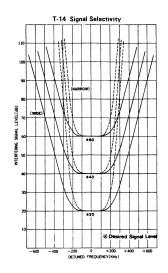
T-14 SCHIEMATIC DIAGRAM

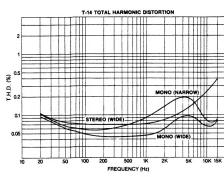


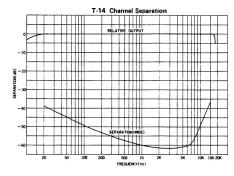
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STANDARD CURVES









SPECIFICATIONS

Receiving Frequency: 87.55MHz - 108MHz(in 50kHz increments)

50dB Quieting Sensitivity: 16.6dBf $(3.7\mu V)$ $10.3 dBf (1.8 \mu V)$ IHF Usable Sensitivity:

72dB Signal to Noise Ratio:

Frequency Response: $30Hz - 15kHz (\pm 1dB)$

Total Harmonic Distortion: (stereo) (mono) 100Hz 0.2% 0.08% (wide)

(wide) 1kHz 0.08% (wide) 0.15% (wide) 6kHz 0.15% (wide) 0.3% (wide) 0.5% 1kHz 0.2% (narrow) (narrow)

1.0dB (wide), 20dB (narrow) Capture Ratio:

80dB (narrow ±300kHz) Alternate Channel Selectivity: 40dB (wide ±400kHz) Adjacent Channel Selectivity: 10dB (narrow ±200kHz)

Spurious Response Ratio: 95dB 95dB IF Response Ratio: 100dB

Image Response Ratio: 60dB AM Suppression Ratio:

100Hz 45dB (wide) Stereo Separation:

48dB (wide), 30dB (narrow) 1kHz 10kHz 38dB (wide)

65dB Subcarrier Product Ratio: 60dBSCA Rejection Ratio: Output Impedance: 100 ohms

 $10\mu V - 100\mu V$ (variable) Muting Threshold: Weight

Net 6.5kgs (14.3 lbs.) Gross 8.0kgs (17.6 lbs.) 438 (W) x 350 (D) x 78 (H) mm Dimensions: (17-1/4" x 13-3/4" x 3-1/16") (including legs and rear protrusions)

Specifications and appearance design subject to change without notice.

LUX CORPORATION, JAPAN